

Contract No.: EP-W-09-002
WA #: 060-RICO-02MV

Region 2 RAC2 Remedial Action Contract

Health and Safety Plan Addendum #1

Pierson's Creek Site
Remedial Investigation/Feasibility
Study
Newark, New Jersey

January 30, 2018

**CDM
Smith**

ACTIVITY HAZARD ANALYSIS FOR ONSITE SAMPLE MANAGEMENT

[1] AHA No. 060-RICO-02MV, Health and Safety Plan Addendum#1	
[2] Work Location: Pierson's Creek Superfund Site	
[3] Task Title: Onsite Sample Management	
[4] Work Phase:	[5] List Work Groups Needed for Each Phase
A. Site Visit/Sample Management	A. Sample Manager
B.	B.
C.	C.

[6] Activity Steps	[7] Work Groups	[8] Hazards	[9] Hazard Controls (Engineered, Operational, Documents, PPE, Qualifications)
Sample Management	A	Back injury	<ul style="list-style-type: none"> When lifting coolers: Keep back straight, bend with knees. Never twist or turn when lifting.
		Cold stress	<ul style="list-style-type: none"> All employees will wear clothes appropriate to the current weather conditions.
		Eye injury	<ul style="list-style-type: none"> If work zone needs to be entered or when using a knife or scissors protective eyewear with sideshields that meet the ANSI-Z-87 standard will be worn.
		Foot injury	<ul style="list-style-type: none"> Employees will wear safety-toed boots.
		Hand injuries	<ul style="list-style-type: none"> Work gloves will be required when using a knife or scissors to cut strapping tape.
		Head injury	<ul style="list-style-type: none"> Hard hats will be worn if samples need to be retrieved in active work zones that require hard hats (I.e. drill rig present).
		Injuries resulting from individuals failing to properly responding to emergency signals and instructions	<ul style="list-style-type: none"> All employees will have successfully completed and have up to date HAZWOPER training. Employees will know emergency assembly points, emergency phone numbers and first aid.

ACTIVITY HAZARD ANALYSIS FOR ONSITE SAMPLE MANAGEMENT

[6] Activity Steps	[7] Work Groups	[8] Hazards	[9] Hazard Controls (Engineered, Operational, Documents, PPE, Qualifications)
		Motorized vehicles	<ul style="list-style-type: none"> Cellular phones are not permitted when driving. Seat belts will be worn. Vehicles are not permitted to exceed posted speed limits.
		Noise	<ul style="list-style-type: none"> Hearing protection will be worn, if samples need to be retrieved, near the drill rig while it is active.
		Slip/trip hazards	<ul style="list-style-type: none"> Good housekeeping requirements and the CDM Smith Safe Think Process will be applied during Sample Management Activities.
		Struck by	<ul style="list-style-type: none"> Class 2 safety vests will be worn if samples need to be retrieved in active work zones that require safety vests (I.e. working in street).

PRE-JOB BRIEFING ATTENDANCE



A decorative graphic consisting of a vertical blue line and a horizontal blue line intersecting. The horizontal line extends to the right, and the vertical line extends downwards. In the bottom-left quadrant formed by these lines, there is a blue gradient that fades out towards the center.

Figures

SAMPLE LOCATION	PC1/9-9.5	PC1/13-13.5	PC1/13.5-14
SAMPLE DATE	11/19/2014	11/19/2014	11/19/2014
SAMPLE DEPTH	9.0- 9.5 FT, BGS	13.0- 13.5 FT, BGS	13.5- 14.0 FT, BGS
SOIL SATURATION	SATURATED	SATURATED	SATURATED
PCBs	<0.067	<0.12	<0.035
MERCURY	8	0.23	<0.039

SAMPLE LOCATION	PC2/8-8.5	PC2/13-13.5
SAMPLE DATE	11/19/2014	11/19/2014
SAMPLE DEPTH	8.0- 8.5 FT, BGS	13.0- 13.5 FT, BGS
SOIL SATURATION	SATURATED	SATURATED
PCBs	<0.056	<0.14
MERCURY	2	0.14

SAMPLE LOCATION	PC3/0.5-1	PC3/9-9.5	PC3/13-13.5
SAMPLE DATE	11/19/2014	11/19/2014	11/19/2014
SAMPLE DEPTH	0.5- 1.0 FT, BGS	9.0- 9.5 FT, BGS	13.0- 13.5 FT, BGS
SOIL SATURATION	UNSATURATED	SATURATED	SATURATED
PCBs	0.404	<0.063	<0.19
MERCURY	45	8.4	1.5

SAMPLE LOCATION	PC4/0.5-1
SAMPLE DATE	11/19/2014
SAMPLE DEPTH	0.5- 1.0 FT, BGS
SOIL SATURATION	UNSATURATED
PCBs	1.89
MERCURY	260

SAMPLE LOCATION	PC5/0.5-1	PC5/2.5-3
SAMPLE DATE	11/19/2014	1/6/2015
SAMPLE DEPTH	0.5- 1.0 FT, BGS	2.5- 3.0 FT, BGS
SOIL SATURATION	UNSATURATED	SATURATED
PCBs	1.81	<0.041
MERCURY	704	35.2

SAMPLE LOCATION	PC5A/0.5-1
SAMPLE DATE	1/6/2015
SAMPLE DEPTH	0.5- 1.0 FT, BGS
SOIL SATURATION	SATURATED
PCBs	<0.054
MERCURY	1280

SAMPLE LOCATION	PC6/0.5-1
SAMPLE DATE	11/19/2014
SAMPLE DEPTH	0.5- 1.0 FT, BGS
SOIL SATURATION	UNSATURATED
PCBs	<0.035
MERCURY	20

SAMPLE LOCATION	PC7/0.5-1
SAMPLE DATE	11/19/2014
SAMPLE DEPTH	0.5- 1.0 FT, BGS
SOIL SATURATION	UNSATURATED
PCBs	<0.034
MERCURY	2.7

SAMPLE LOCATION	PC08/0.5-1
SAMPLE DATE	1/6/2015
SAMPLE DEPTH	0.5- 1.0 FT, BGS
SOIL SATURATION	UNSATURATED
PCBs	<0.037
MERCURY	5.4

SAMPLE LOCATION	PC09/12-12.5
SAMPLE DATE	1/6/2015
SAMPLE DEPTH	12.0-12.5 FT, BGS
SOIL SATURATION	UNSATURATED
PCBs	<0.047
MERCURY	9.7

SAMPLE LOCATION	PC10/1-1.5
SAMPLE DATE	1/6/2015
SAMPLE DEPTH	1.0- 1.5 FT, BGS
SOIL SATURATION	UNSATURATED
PCBs	<0.034
MERCURY	0.12

PARAMETER	NJDEP's NRDCSRS (mg/kg)	NJDEP's RDCSRS (mg/kg)	NJDEP's Default IGWSSL (mg/kg)
PCBs	1	0.2	0.2
MERCURY	65	23	0.1

LEGEND					
ITEM	SYMBOL	ITEM	SYMBOL	ITEM	SYMBOL
SPOT ELEVATIONS	+12.00	CURB		UTILITY LINES	
CONTOURS	-----12.0-----	DEPRESSED CURB			
TOWN LINE	=====	LIGHT		INLETS	
PROPERTY LINE	=====	POLES		PREVIOUS BORING LOCATION (SYMBOL NOT TO SCALE)	
INTERIOR LOT LINE	-----	SIDEWALKS		PROPOSED BORING LOCATION (SYMBOL NOT TO SCALE)	
R.O.W. LINE	=====	WATER VALVE			
		CHAIN LINK FENCE			

NOTES:

1. ALL SOIL CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM (mg/kg); LEACHATE CONCENTRATION REPORTED IN MICROGRAMS PER LITER (ug/L).

2. IGWSSL = NJDEP's NOVEMBER 2013 DEFAULT IMPACT TO GROUNDWATER SOIL SCREENING LEVEL.

3. NRDCSRS = NJDEP's JUNE 2008 NON-RESIDENTIAL DIRECT CONTACT SOIL REMEDIATION STANDARD.

4. RDCSRS = NJDEP's JUNE 2008 RESIDENTIAL DIRECT CONTACT SOIL REMEDIATION STANDARD.

5. BOLD INDICATE RESULTS GREATER THAN THE IGWSSL (UNSATURATED SOILS ONLY).

6. BOLD, HIGHLIGHTED AND ITALICIZED INDICATE RESULTS GREATER THAN THE NRDCSRS.
7. BOLD AND HIGHLIGHTED INDICATE RESULTS GREATER THAN THE RDCSRS.

8. < # CONCENTRATION LESS THAN THE REPORTING LIMIT.

9. FT, BGS = FEET, BELOW GROUND SURFACE.

10. PCBs = POLYCHLORINATED BIPHENYLS.

11. WASTE CLASSIFICATION SAMPLES (WC-#) WERE 4-POINT COMPOSITE SAMPLES COLLECTED FROM THE PILES AS SHOWN.

DRAWN BY: AR

DATE: 10-18-2017

DESIGNED BY: SR

DATE: 10-18-2017

APPROVED BY: [Signature]

DATE: 10-18-2017

PROJECT NUMBER: 06-188E

SCALE: AS NOTED

FIGURE 1

429 DELANCY STREET

BLOCK 5042, LOT 1502

CITY OF NEWARK

ESSEX COUNTY, NEW JERSEY

SIDECAST SAMPLE LOCATIONS

MERCURY RESULTS

MATRIXNEWORLD

Engineering Progress

Matrix New World Engineering, P.C.

26 Columbia Turnpike

Florence Park, New Jersey 07932

WBE / DBE / SBE

NEW JERSEY CERTIFICATE OF AUTHORIZATION No. 24GA2962300

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REVISIONS

NO.	DESCRIPTION	DATE	BY: